#### STATE OF IOWA

### DEPARTMENT OF COMMERCE

#### UTILITIES BOARD

IN RE:

UPDATE OF GAS AND ELECTRIC SAFETY STANDARDS

DOCKET NO. RMU-02-1

### ORDER ADOPTING AMENDMENTS

(Issued March 18, 2002)

Pursuant to Iowa Code §§ 17A.4, 476.1, 476.1A, 476.2, 478.1 and 479.17 (2001), the Utilities Board (Board) on January 17, 2002, issued an order in Docket No. RMU-02-1, In re: Update of Gas and Electric Safety Standards, "Order Commencing Rule Making," to consider amendments to 199 IAC 10.12(1), 10.17, 19.5(2), 19.6(3), 19.8(3), 20.5(2), 20.6(3)"a," 25.2(1), and 25.2(5). The "Notice of Intended Action" was published in IAB Vol. XXIV, No.16 (2/6/02), p. 1239, as ARC 1340B. The proposed amendments updated the references in the Board's rules to current federal safety standards, and industry association gas and electric safety and metering standards.

The "Adopted and Filed" notice, which is attached to this order and incorporated herein by reference, contains an explanation of the procedural history of the current rule making, a discussion of the comments, and the modifications to the rule making made and adopted by the Board.

Executive Secretary

# IT IS THEREFORE ORDERED:

- 1. A rule making identified as Docket No. RMU-02-1 is adopted.
- 2. The Executive Secretary is directed to submit for publication in the Iowa Administrative Bulletin an "Adopted and Filed" notice in the form attached to and incorporated by reference in this order.

**UTILITIES BOARD** 

	/s/ Diane Munns
	/s/ Mark O. Lambert
ATTEST:	
/s/ Judi K. Cooper	/s/ Elliott Smith

Dated at Des Moines, Iowa, this 18<sup>th</sup> day of March, 2002.

## **UTILITIES DIVISION [199]**

## Adopted and Filed

Pursuant to Iowa Code sections 17A.4, 476.1, 476.1A, 476.2, 478.1, and 479.17 (2001), the Utilities Board (Board) gives notice that on March 18, 2002, the Board issued an order in Docket No. RMU-02-1, <u>In re: Update of Gas and Electric Safety Standards</u> "Order Adopting Amendments." The amendments to 199 IAC 10.12(1), 10.17, 19.5(2), 19.6(3), 19.8(3), 20.5(2), 20.6(3)"a," 25.2(1), and 25.2(5) update the references in these rules to the most recent federal safety standards or most current industry association gas and electric safety and metering standards. Notice of Intended Action was published in IAB Vol. XXIV, No. 16(2/6/02) p. 1239, as ARC 1340B.

Written comments in this rule making were to be filed on or before February 26, 2002. Peoples Natural Gas Company, Division of UtiliCorp United Inc., the Consumer Advocate Division of the Department of Justice, and Interstate Power and Light Company filed comments stating they supported the updating of the references. Central lowa Power Cooperative (CIPCO) stated it supported the updating of the references to the National Electrical Safety Code (NESC), also known as the American National Standards Institute (ANSI). CIPCO encouraged a delay in adoption of the 2002 NESC to allow employee training to code implementation.

The Iowa Association of Electric Cooperatives (IAEC) filed comments stating that it represents rural electric cooperatives that are subject to the safety and engineering

standards for equipment, operations, and procedures adopted by the Board. In its comments, IAEC addresses the proposal to update the reference to NESC 2002 in 199 IAC 25.2(1) except for the portion which consists of work rules to be followed by employees during the installation, operation, and maintenance of electric supply and communication systems, Part 4 of the NESC.

IAEC urges the Board not to exclude Part 4 from its jurisdiction as the Board has done in the past. IAEC states that it understands the Board's position that the enforcement of workplace safety standards is a function of the federal Occupational Health and Safety Administration (OSHA) and that OSHA has adopted safety standards applicable to workplace safety in the construction of electric transmission and distribution lines and equipment, and covering the operation and maintenance of electric power generation, control, transformation, transmission, and distribution lines and equipment.

IAEC suggests that workplace safety rules cannot be separated from the obligations the Board has imposed on electric utilities to reduce those hazards in connection with electric utility service. IAEC suggests further that the decision to not adopt the workplace safety rules may have the unanticipated effect of decreasing the safeguarding of public safety. IAEC then states that the standards adopted in Part 2 of the NESC by the Board in this rule making address areas that directly affect employee safety.

Finally, IAEC proposes that the Board update the reference to the National Electric Code in 199 IAC 15.10(1)"f."

The Board finds that if a utility such as CIPCO has difficulty in obtaining the necessary training for its employees on the updated safety standards, the utility may file for a waiver of the rules once they are in effect. CIPCO does not state how long it will need to train its employees and the Board waiving the updates on an individual company basis is preferable to delaying the effective date of the rules.

The Board understands the IAEC's position concerning the adoption of Part 4 of the NESC. The Board has considered this issue in the past and found that it was preferable to leave the enforcement of workplace safety to OSHA rather than to the Board's employees. OSHA has the specialized expertise to understand and inspect a utility's operations and maintenance to determine whether they conform to OSHA rules. The Board does not have this same level of experience on these safety issues and it does not reduce safety for the Board to defer jurisdiction for workplace safety.

In addition, since the Board only proposed to amend 199 IAC 25.2(1) to update the reference to the NESC 2002, it would be beyond the scope of this rule making to adopt Part 4. The Board has considered this issue in the past and found that the enforcement of workplace safety standards is better left to OSHA. The Board finds that Part 2 of NESC covers supply and communications conductors and equipment in overhead lines, rather than the work rules to be followed in installation, operation and maintenance. The Board has proposed to adopt Part 2 of the NESC, but will not adopt the work rules in Part 4.

The Board considers the request to update the reference to the National Electric Code in 199 IAC 15.10(1)"f" to be within the scope of this rule making. This rule making was noticed to update the references in the Board's rules to the most recent

federal safety standards and most current editions of industry standards. The Board inadvertently failed to include the reference in paragraph 15.10(1)"f" in the "Notice of Intended Action." Since the omission has been pointed out, the Board will adopt the update with the other updates.

With the addition of the amendment to 15.10(1)"f," the Board will adopt the amendments as proposed in the "Notice of Intended Action" published February 6, 2002, in the Iowa Administrative Bulletin.

The amendments are intended to implement lowa Code sections 17A.4, 476.1, 476.1A, 476.2, 478.1, and 479.17.

The amendments will become effective May 22, 2002.

The following amendments are adopted.

Item 1. Amend subrule 10.12(1) as follows:

- **10.12(1)** All pipelines, underground storage facilities, and equipment used in connection therewith shall be designed, constructed, operated, and maintained in accordance with the following standards:
- a. 49 CFR Part 191, "Transportation of Natural and Other Gas by Pipeline, Annual Reports, Incident Reports, and Safety-Related Condition Reports," as amended through April 30, 1999 March 13, 2002.
- b. 49 CFR Part 192, "Transportation of Natural and Other Gas by Pipeline;
   Minimum Federal Safety Standards," as amended through April 30, 1999 March 13, 2002.
- c. 49 CFR Part 195, "Transportation of Hazardous Liquids By Pipeline," as amended through April 30, 1999.

- d.c. 49 CFR Part 199, "Drug and Alcohol Testing," as amended through April 30, 1999 March 13, 2002.
- e. ASME B31.4 1992, "Liquid Transportation Systems for Hydrocarbons, Liquid Petroleum Gas, Anhydrous Ammonia, and Alcohols."
- f.d. ASME B31.8 -19951999, "Gas Transmission and Distribution Piping Systems."
  - g.e. ASME B31.11 1989, "Slurry Transportation Piping Systems."
- h.f. 199 IAC 9, "Protection of Underground Improvements and Soil Conservation Structures and Restoration of Agricultural Lands After Pipeline Construction."

  "Restoration of Agricultural Lands During and After Pipeline Construction."

Conflicts between these the standards established in the above paragraphs or between the requirements of this rule and other, requirements which are shown to exist by appropriate written documentation filed with the board, shall be resolved by the board.

- Item 2. Amend rule 199—10.17(479) as follows:
- 199—10.17(479) Accidents and incidents. Any pipeline incident or accident which is reportable to the U.S. Department of Transportation under 49 CFR Part 191 or Part 195 as amended through April 30, 1999 March 13, 2002, shall also be reported to the board, except that the minimum economic threshold of damage required for reporting to the board is \$15,000. Duplicate copies of any written accident reports and safety-related condition reports submitted to the U.S. Department of Transportation shall be provided to the board.
  - Item 3. Amend paragraph 15.10(1)"f" as follows:

- f. National Electrical Code, ANSI/NFPA 70-1993-2002.
- Item 4. Amend subrule 19.5(2) as follows:
- **19.5(2)** Standards incorporated by reference.
- a. The design, construction, operation, and maintenance of gas systems and liquefied natural gas facilities shall be in accordance with the following standards where applicable:
- (1) 49 CFR Part 191, "Transportation of Natural and Other Gas by Pipeline; Annual Reports, Incident Reports, and Safety-Related Condition Reports," as amended through April 30, 1999 March 13, 2002.
- (2) 49 CFR Part 192, "Transportation of Natural and Other Gas by Pipeline; Minimum Federal Safety Standards," as amended through April 30, 1999 March 13, 2002.
- (3) 49 CFR Part 193, "Liquefied Natural Gas Facilities: Federal Safety Standards," as amended through April 30, 1999 March 13, 2002.
- (4) 49 CFR Part 199, "Drug and Alcohol Testing," as amended through April 30, 1999 March 13, 2002.
- (5) ASME B31.8 1995 1999, "Gas Transmission and Distribution Piping Systems."
- (6) ANSI/NFPA No. 59-<del>1998</del> <u>2001</u>, "Standard for the Storage and Handling of Liquefied Petroleum Gases at Utility Gas Plants."
- b. The following publications are adopted as standards of accepted good practice for gas utilities:
  - (1) ANSI Z223.1/NFPA 54-1996 1999, "National Fuel Gas Code."

- (2) ANSI A225/NFPA 501A-1997 2000, "Fire Safety Criteria for Manufactured Home Installations, Sites, and Communities."
  - Item 5. Amend subrule 19.6(3) as follows:
- **19.6(3)** Accepted good practice. The following publications are considered to be representative of accepted good practice in matters of metering and meter testing:
- a. American National Standard for Gas Displacement Meters (500 Cubic Feet
   Per Hour Capacity and Under), ANSI B109.1-1992 2000.
- b. American National Standard for Diaphragm Type Gas Displacement Meters
   (Over 500 Cubic Feet Per Hour Capacity), ANSI B109.2 1992-2000.
- c. American National Standard for Rotary Type Gas Displacement Meters, ANSI B109.3-1992 2000.
  - d. Handbook E-4: Displacement Gas Meters, American Meter Company, 1970.
- e.d. Measurement of Gas Flow by Turbine Meters, ANSI/ASME MFC-4M-1990 1997.
- f. Measurement of Fuel Gas by Turbine Meters, American Gas Association

  Transmission Measurement Committee Report No. 7, 1981.
- g.e. Orifice Metering of Natural Gas and Other Related Hydrocarbon Fluids, ANSI/API 2530-1991.
  - Item 6. Amend subrule 19.8(3) as follows:
- **19.8(3)** *Turning on gas.* Each utility upon the installation of a meter and turning on gas or the act of turning on gas alone shall take the necessary steps to assure itself that there exists no flow of gas through the meter which is a warning that the

customer's piping or appliances are not safe for gas turn on. (Ref: Sec. 4.2 and Appendix D, ANSI Z223.1/NFPA 54-1996 1999).

- Item 7. Amend subrule 20.5(2) as follows:
- **20.5(2)** Acceptable standards Standards incorporated by reference. The utility shall use the applicable provisions in the publications listed below as standards of accepted good practice unless otherwise ordered by the board.
  - a. No change.
  - b. National Electrical Code, ANSI/NFPA 70-1999 2002.
- c. American National Standard Requirements for Instrument Transformers,

  ANSI/IEEE C57.13.1<del>(1981); C57.13.2 (1992); and C57.13.3 (1983) -1981(R1999);</del>

  and C57.13.3-1983 (R1991).
  - d. American National Standard Requirements for Electrical Analog Indicating Instruments, ANSI C39.1-1981 (R1992).
  - e. to g. No change.
  - Item 8. Amend paragraph 20.6(3)"a" as follows:
- a. American Natiolal Standard Code for Electricity Metering, ANSI C12.1-1995
   2001.
  - Item 9. Amend subrule 25.2(1) as follows:
- **25.2(1)** National Electrical Safety Code. The American National Standards
  Institute (ANSI) C2-1997 2002 "National Electrical Safety Code" (NESC) as ultimately conformed to the ANSI-approved draft by correction of publishing errors through issuance of printed corrections is adopted as part of the Iowa electrical safety code,

except Part 4, "Rules for Operation of Electric Supply and Communications Lines and Equipment," which is not adopted by the board.

Item 10. Amend subrule 25.2(5) as follows:

**25.2(5)** Other references adopted.

a. The "National Electric Code," ANSI/NFPA 70-1999 2002, is adopted as a standard of accepted good practice for customer-owned electrical facilities beyond the utility point of delivery.

b. "The Lineman's and Cableman's Handbook," Eighth Ninth Edition; Kurtz,
Edwin B. and Shoemaker, Thomas M.; New York, McGraw-Hill Book Co., is adopted
as a recommended guideline to implement the "National Electrical Safety Code" or
"National Electrical Code," and for developing the inspection and maintenance plans
required by 199 IAC 25.3(476,478).

March 18, 2002

/s/ Diane Munns

Diane Munns Chairman